

PE NUMBER: 0305119F

UNCLASSIFIED

PE TITLE: Medium Launch Vehicles (Space)

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0305119F Medium Launch Vehicles (Space)				PROJECT 624A		
COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
624A Medium Launch Vehicle	2,002	7,338	1,179	1,963	1,470	979	0	0	0	408,550
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description**
 National Security requirements dictate a continuing, highly reliable means of placing critical Department of Defense (DoD) satellites into required orbits. Assured access to space, directed by the President in the National Security Launch Strategy, will be accomplished through the use of a robust mix of Expendable Launch Vehicles (ELVs). The Medium Launch Vehicle (MLV) program provides sustainment, procurement and launch of DoD ELVs, including Atlas II and Delta II at Cape Canaveral AS, FL, and at Vandenberg AFB, CA. MLV launches Defense Satellite Communication System (DSCS) and Global Positioning System (GPS) satellites. The RDT&E budget for MLV primarily consists of engineering support for system performance upgrades to both the vehicles and the launch facilities, new payload integration, sustaining engineering, and post-flight assessment to maintain the high reliability of the launch vehicles.

(U) **FY 1998:** (\$ in thousands)
 – (U) \$ 944 Delta II range required facilities upgrade
 – (U) \$ 0 Delta II systems integration
 – (U) \$ 1,058 Sustaining engineering and mission support for MLV launch facilities, infrastructure, and launch operations for launch complexes 3, 17, and 36
 – (U) \$ 2,002 Total

(U) **FY 1999:** (\$ in thousands)
 – (U) \$ 500 Delta II range required facilities upgrade
 – (U) \$ 700 Delta II systems integration
 – (U) \$ 1,922 Sustaining engineering and mission support for MLV launch facilities, infrastructure, and launch operations for launch complexes 3, 17, and 36
 – (U) \$ 3,990 Funds reprogrammed to higher Air Force priorities
 – (U) \$ 226 Identified as a source for SBIR
 – (U) \$ 7,338 Total

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(U) FY 2000: (\$ in thousands)

- (U) \$ 500 Delta II range required facilities upgrade
- (U) \$ 350 Delta II systems integration
- (U) \$ 329 Sustaining engineering and mission support for MLV launch facilities, infrastructure, and launch operations for launch complexes 3, 17, and 36
- (U) \$ 1,179 Total

(U) FY 2001: (\$ in thousands)

- (U) \$ 500 Delta II range required facilities upgrade
- (U) \$ 300 Delta II systems integration
- (U) \$ 1,163 Sustaining engineering and mission support for MLV launch facilities, infrastructure, and launch operations for launch complexes 3, 17, and 36
- (U) \$ 1,963 Total

(U) **B. Budget Activity Justification:**

This program is in Budget Activity 7, Operational Systems Development, because the Medium Launch Vehicles program is in full production and fully operational.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	Total
(U) Previous President's Budget (FY1999 PB)	5,130	7,375	8,009	7,992	430,139
(U) Appropriated Value	5,719	7,375			
(U) Adjustments to Appropriated Value					
a. Congressional Gen Reductions	-478	-37			
b. SBIR	-118				
c. Omnibus or Other Above Threshold Reprogram	-35				
d. Below Threshold Reprogramming	-3,086				
(U) Adjustments to Budget Years Since FY 1999 PB			-6,830	-6,029	
(U) Current Budget Submit/FY2000 President's Budget	2,002	7,338	1,179	1,963	408,550

(U) Significant Program Changes: Funding: \$3,086 of FY98 funds were reprogrammed to finance higher priority Air Force programs. Funds were available due to requirement reductions for integration and launch facility/infrastructure upgrades and improvements. \$226 of FY99 is identified as a source for SBIR. FY00 and 01 adjustments are due to reduced requirements for sustaining engineering.

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(U) D. Other Program Funding Summary (\$ in Thousands)

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) Missile Procurement, Air Force (PE35119F) (BA45, P-25/26)	195,550	175,085	64,834	54,683	41,963	10,517	6,812	0	0	2,597,534

Related RDT&E: None

(U) E. Acquisition Strategy:

The MLV program is in final production and consists of two medium launch vehicles: Atlas II and the Delta II. The Air Force Atlas II launch vehicle RDT&E and production programs are complete. The procurement dollars for the Air Force Atlas II program finances the launch services for the two remaining DSCS missions on the Lockheed Martin Atlas launch base operations contract. The Delta II program primarily consists of launching replenishment Global Positioning System (GPS) satellites. The final option on the Boeing production contract for the last 5 Delta II boosters was exercised in January 1999. The MLV program is scheduled to start transitioning to EELV beginning with FY02 launches.

(U) F. Schedule Profile

	<u>FY 1998</u>				<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(U) Delta/GPS Launches	*						X	X	X	X	X	X	X	XX	X	X
(U) Delta/STP Launch					*											
(U) Atlas /DSCS Launches	*							X				X				

*=complete
X=planned

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0305119F Medium Launch Vehicles (Space)					PROJECT 624A	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U)	Delta II Range Facilities Upgrades				944	500	500	500			
(U)	Delta II Systems Integration				0	700	350	300			
(U)	Sustaining Engineering and Mission Support				1,058	1,922	329	1,163			
(U)	Identified as a source for SBIR					226					
(U)	Pending below threshold reprogramming					3,990					
(U)	Total				2,002	7,338	1,179	1,963			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government Performing <u>Activity</u>	Contract Method/Type or Funding <u>Vehicle</u>	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Total Prior to <u>FY 1998</u>	Budget <u>FY 1998</u>	Budget <u>FY 1999</u>	Budget <u>FY 2000</u>	Budget <u>FY 2001</u>	Budget to <u>Complete</u>	Total <u>Program</u>
<u>Product Development Organizations</u>											
Lockheed Martin	SS/FFP	Jun 88	N/A	N/A	70,927	0	0	0	0	0	70,927
Boeing	SS/FFP	Sep 87	N/A	N/A	205,270	0	0	0	0	0	205,270
Boeing	C/FFP	Apr 93	N/A	N/A	23,533	1,535	2,500	1,000	1,500	2,100	32,168
GSAC	Various	Various	N/A	N/A	3,321	0	0	0	0	0	3,321
Austere Improvements	Various	Various			10,484	0	0	0	0	0	10,484
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Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
<u>Support and Management Organizations</u>											
Mission Support	SS/FPI	FY94	N/A	N/A	15,736	467	622	179	463	349	17,816
Various SMC	Various	FY94	N/A	N/A	53,218	0	0	0	0	0	53,218
Other Ktr Sup	SS/FFP	FY94	N/A	N/A	2,254	0	0	0	0	0	2,254
Vandenberg Sup	Various	Various	N/A	N/A	3,270	0	0	0	0	0	3,270
Environment/ Safety	Various	Various	N/A	N/A	5,606	0	0	0	0	0	5,606
Source for SBIR							226				226
Pending BTR							3,990				3,990
<u>Test and Evaluation Organizations</u>											
Not Applicable											
Government Furnished Property: Not Applicable											
Subtotal Product Development					313,535	1,535	2,500	1,000	1,500	2,100	322,170
Subtotal Support and Management					80,084	467	4,838	179	463	349	86,380
Subtotal Test and Evaluation					0	0	0	0	0	0	0
Total Project					393,619	2,002	7,338	1,179	1,963	2,449	408,550
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